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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,242	09/26/2000	Mark M. Ishikawa		4706

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ORRICK, HERRINGTON & SUTCLIFFE, LLP
1020 Marsh Road
Menlo Park, CA 94025

EXAMINER

LANIER, BENJAMIN E

ART UNIT PAPER NUMBER

2132

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/670,242

Applicant(s)

ISHIKAWA ET AL.

Examiner

Benjamin E Lanier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 83-110 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 83-110 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

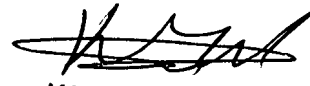
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


KAMBIZ ZAND
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07 March 2006 has been entered.

Response to Amendment

2. Applicant's amendment filed 07 March 2006 amends claims 83, 85, 92, 94, 96, 97, and 100-102. Applicant's amendment has been fully considered and is entered.

Response to Arguments

3. Applicant's arguments filed 07 March 2006 have been fully considered but they are not persuasive. Applicant's argument that the specification fully supports the added claim language added in the amendment filed 12 August 2005 is not persuasive because Applicant has discusses (on page 10 of the remarks section) various sections of the specification but has not pointed to areas of the specification that show "said key generation system generates a **second** unique data identifier for the source file". Applicant has not shown support for a key generation system that generates two unique data identifiers for a single source file. Therefore all the other claim limitations that involve the second unique data identifier also lack support.

4. Applicant's argument that the specification provides support for "said database system deletes said first unique data identifier and the first source elements" is persuasive and the §112 first paragraph rejection of claim 94 is withdrawn.

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5. Applicant's arguments with respect to the Rhoads reference have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Rabin, U.S. Patent No. 6,697,948.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 93, 95, 99-102 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The added material which is not supported by the original disclosure is as follows: said key generation system generates a second unique data identifier for the source file, wherein said source print generation system extracts a second predetermined number of second source elements from the source file in accordance with said second unique data identifier, and said database system associates said second unique data identifier and the second source elements with the source file, said source print detection system compares the second source elements with corresponding target elements in the target file in accordance with said second unique data identifier and determines whether coincidence exists between the second source elements in the source file and the target elements in the target file, said preselected coincidence level differs from said second preselected coincidence level.

Claim Rejections - 35 USC § 102

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8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 83-93, 95-99, 101, 103-107 are rejected under 35 U.S.C. 102(e) as being Rabin by U.S. Patent No. 6,697,948. Referring to claim 83, Rabin discloses an information protection system wherein copyright protection of vendor created software is provided using detection and verification programs. The vendor created software is distributed with a supervising program that detects whether the software contains an appropriate tag (Col. 20, lines 61-63). If the supervising program discovers that the software is untagged, a fingerprint of the software is computing using selected portions of the software and storing the fingerprint in a fingerprint table of the user device (Col. 20, lines 63-65). A guardian center that includes a fingerprint data structure, and receives all fingerprints from the user devices for each untagged instance of software installed on user devices (Col. 20, line 65 – Col. 21, line 3), which meets the limitation of a data management server system that receives a source file for registration and a target file for comparison with the source file. The fingerprints are generated from selected portions of the software (Col. 20, lines 63-64), which meets the limitation of a key generation system that generates a first unique data identifier for the source file by identifying a predetermined number of source elements in the source file as first source elements, a source print generation system that extracts the first source elements from the source file in accordance with said first unique data identifier. The software vendor identifier can be embedded in the software as a tag (Col. 36, lines 13-16), which meets

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the limitation of a data embedding system that embeds an information block into the source file, said information block including information pertaining to ownership of intellectual property rights. The fingerprint data structure stored in the guardian center can be stored along with the software in a database (Col. 5, lines 8-10 & Figure 2 element 300), which meets the limitation of a database system that stores the source file with the embedded information block, said first unique data identifier, the first source elements, and ownership information of the source file. A verification program, resident on the guardian center, compares each fingerprint received from the user device against the fingerprints in its fingerprint data structure to determine if an untagged instance of software used on a user device is an infringing instance of software (Col. 21, lines 3-8), which meets the limitation of a source print detection system that compares the first source elements with corresponding target elements in the target file in accordance with said first unique data identifier and that determines whether coincidence exists between the first source elements in the source file and the target elements in the target file. If the verification program determines that the fingerprints match, punitive action is performed (Col. 58, lines 7-19). One form of punitive action is the notification of the software vendor that created the software (Col. 58, lines 20-23), which meets the limitation of wherein the data management system accesses ownership information to notify an owner of the source file if a first preselected coincidence level exists between the first source elements and the target elements.

Referring to claim 84, Rabin discloses that the fingerprint data structure stored in the guardian center can be stored along with the software in a database (Col. 5, lines 8-10 & Figure 2 element 300), which meets the limitation of said database system is at least partially incorporated with said data management server system.

Referring to claim 85, Rabin discloses that the fingerprints are generated from selected portions of the software (Col. 20, lines 63-64), which meets the limitation of said source print generation system extracts the first source elements being defined by element characteristics selected from the group consisting of an element size, an element start position, and an element initial position relative to said element start position.

Referring to claims 86, 87, Rabin discloses that the embedded tags include user-defined information (Col. 36, lines 30-32) and that these tags can be digitally signed (Col. 36, lines 2-4 & Col. 40, lines 43-47), which meets the limitation of said user-defined information is at least partially encrypted.

Referring to claims 88, 89, Rabin discloses that the embedded tags can include usage information (Col. 35, lines 14-17), user device id (Col. 36, lines 30-33 & Col. 44, lines 1-8), software identifier (Col. 37, lines 40-45), which meets the limitations of mandatory compliance information, authorized user information, a file description, said mandatory compliance information includes information selected from the group consisting of identification information, custodial information.

Referring to claim 90, Rabin discloses that the guardian server communicates with external computers (Figures 1 & 2).

Referring to claim 91, Rabin discloses that the tag server and guardian server may be bodily incorporated into the software vendor computer system (Col. 27, lines 48-50), which meets the limitation of the data management system. The software vendor distributes the software to the user's (Figure 2, elements 111 & 112), which meets the limitation of said data

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management server system provides the source file with said embedded information block to authorize users associated with one or more of the at least one external computer system.

Referring to claim 92, Rabin discloses that the guardian server contains a verification program that communications with a supervising program on the individual user devices to locate target files for comparison against the original source files (Col. 20, line 63 – Col. 21, line 8), which meets the limitation of said source print detection system includes a search member that searches one or more of the at least one external computer system for target files to be compared with the source files.

Referring to claim 93, Rabin discloses that a second fingerprint is generated from location specific information within the software (Col. 4, lines 24-44), which meets the limitation of wherein said key generation system generates a second unique data identifier for the source file, wherein said source print generation system extracts a second predetermined number of second source elements from the source file in accordance with said second unique data identifier, and said database system associates said second unique data identifier and the second source elements with the source file.

Referring to claim 95, Rabin discloses that the second fingerprint can be compared with the software, using the location specific information, to see if the second fingerprint is representative of the same software (Col. 4, lines 24-44), which meets the limitation of said source print detection system compares the second source elements with corresponding target elements in the target file in accordance with said second unique data identifier and determines whether coincidence exists between the second source elements in the source file and the target elements in the target file.

Referring to claim 96, Rabin discloses an information protection system wherein copyright protection of vendor created software is provided using detection and verification programs. The vendor created software is distributed with a supervising program that detects whether the software contains an appropriate tag (Col. 20, lines 61-63). If the supervising program discovers that the software is untagged, a fingerprint of the software is computing using selected portions of the software and storing the fingerprint in a fingerprint table of the user device (Col. 20, lines 63-65). A guardian center that includes a fingerprint data structure, and receives all fingerprints from the user devices for each untagged instance of software installed on user devices (Col. 20, line 65 – Col. 21, line 3), which meets the limitation of receiving a source file for registration and a target file for comparison with the source file. The fingerprints are generated from selected portions of the software (Col. 20, lines 63-64), which meets the generating a first unique data identifier for the source file by identifying a predetermined number of source elements in the source file as first source elements, extracting the first source elements from the source file in accordance with said first unique data identifier. The software vendor identifier can be embedded in the software as a tag (Col. 36, lines 13-16), which meets the limitation of embedding an information block into the source file, said information block including information pertaining to ownership of intellectual property rights. The fingerprint data structure stored in the guardian center can be stored along with the software in a database (Col. 5, lines 8-10 & Figure 2 element 300), which meets the limitation of storing the source file with the embedded information block, said first unique data identifier, the first source elements, and ownership information of the source file. A verification program, resident on the guardian center, compares each fingerprint received from the user device against the fingerprints in its fingerprint

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data structure to determine if an untagged instance of software used on a user device is an infringing instance of software (Col. 21, lines 3-8), which meets the limitation of comparing the first source elements with corresponding target elements in the target file in accordance with said first unique data identifier and determining whether coincidence exists between the first source elements in the source file and the target elements in the target file. If the verification program determines that the fingerprints match, punitive action is performed (Col. 58, lines 7-19). One form of punitive action is the notification of the software vendor that created the software (Col. 58, lines 20-23), which meets the limitation of accessing ownership information to notify an owner of the source file if a first preselected coincidence level exists between the first source elements and the target elements.

Referring to claims 97, 98, Rabin discloses that the fingerprints are generated from selected portions of the software (Col. 20, lines 63-64), which meets the limitation of said generating said first unique data identifier includes providing at least one data parameter associated with a selected characteristic of said first unique data identifier and incorporating said at least one data parameter into said first unique data identifier, said source print generation system extracts the first source elements being defined by element characteristics selected from the group consisting of an element size, an element start position, and an element initial position relative to said element start position.

Referring to claim 99, Rabin discloses that a second fingerprint is generated from location specific information within the software (Col. 4, lines 24-44), which meets the limitation of generating a second unique data identifier for the source file by identifying a second predetermined number of second source elements in the source file, extracting the second source

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elements from the source file in accordance with said second unique data identifier, and storing said second unique data identifier and the second source elements with the source file.

Referring to claim 101, Rabin discloses that the second fingerprint can be compared with the software, using the location specific information, to see if the second fingerprint is representative of the same software (Col. 4, lines 24-44), which meets the limitation of comparing the second source elements with corresponding target elements in the target file in accordance with said second unique data identifier and determining whether coincidence exists between the second source elements in the source file and the target elements in the target file. If the verification program determines that the fingerprints match, punitive action is performed (Col. 58, lines 7-19). One form of punitive action is the notification of the software vendor that created the software (Col. 58, lines 20-23), which meets the limitation of accessing ownership information to notify an owner of the source file if a second preselected coincidence level exists between the second source elements and the target elements.

Referring to claim 103, Rabin discloses that the software can contain hashes (Col. 3, line 66 – Col. 4, line 9), which meets the limitation of the source file having data in a compressed format.

Referring to claim 104, Rabin discloses that the fingerprints are generated from the non-hashed information within the software (Col. 20, lines 63-64), which meets the limitation of extracting the source elements includes expanding the data of the source file.

Referring to claim 105, Rabin discloses generating concatenated information from the software (Col. 12, lines 33-39), which meets the limitation of said extracting the source elements includes forming a concatenated string of the source elements.

Referring to claim 106, Rabin discloses that the fingerprinting procedure can be standardized (Col. 4, lines 24-31), which meets the limitation of normalizing data of the source file and extracting the normalized data from the source file.

Referring to claim 107, Rabin discloses that the embedded tags include user-defined information (Col. 36, lines 30-32) and that these tags can be digitally signed (Col. 36, lines 2-4 & Col. 40, lines 43-47), which meets the limitation of partially encrypting said information block.

Referring to claim 108, Rabin discloses that the guardian server communicates with external computers (Figures 1 & 2).

Referring to claim 109, Rabin discloses that the guardian server contains a verification program that communicates with a supervising program on the individual user devices to locate target files for comparison against the original source files (Col. 20, line 63 – Col. 21, line 8), which meets the limitation of searching one or more of the at least external computer system for target files to be compared with the source file.

Referring to claim 110, Rabin discloses that the tag server and guardian server may be bodily incorporated into the software vendor computer system (Col. 27, lines 48-50), which meets the limitation of the data management system. The software vendor distributes the software to the user's (Figure 2, elements 111 & 112), which meets the limitation of providing the source file with said embedded information block to authorized users associated with one or more of the at least one external computer system.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 94, 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabin, U.S. Patent No. 6,697,948. Referring to claims 94, 100, Rabin discloses that the specific locations that are used to calculate the fingerprints can be changed over time in response to piracy attacks (Col. 37, lines 11-14), but Rabin does not disclose that these updated fingerprints are stored as replacements to the original fingerprints. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the newly calculated fingerprints replace the old fingerprints with the guardian center database in order to reduce the storage of information that is no longer being utilized within the protection system. If these old fingerprints were no longer being used, it would have been obvious to one of ordinary skill in the art to replace them with the new fingerprints.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E. Lanier whose telephone number is 571-272-3805.

The examiner can normally be reached on M-Th 7:30am-5:00pm, F 7:30am-4pm.

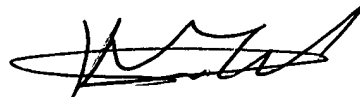
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Benjamin E. Lanier



KAMBIZ ZAND
PRIMARY EXAMINER